12/11/87 S0465-1A

ARIZONA LABOR MARKET INFORMATION NEWSLETTER

Vol. XI No. 11
November 1987

Unemployment Rate

Seasonally Adjusted
September*

ARIZONA	5.7%
Maricopa Co.	4.7%
Pima Co.	4.6%
UNITED STATES	5.9%

Consumer Price Index

National-August 1987
1967 - Base Year

Wage Earner/Clerical Worker - 337.4
% Chg. Yr. Ago 4.3

All Urban - 342.7
% Chg. Yr. Ago 4.3

Phoenix-2nd Qtr. 1987
1977 - Base Year

All Urban - 200.7
% Chg. Yr. Ago 4.2

Tucson-2nd Qtr. 1987
1st Qtr. 1983 - Base Qtr.

All Urban - 119.8
% Chg. Yr. Ago 3.3

* Preliminary

Everything You Always Wanted to Know-- About Wages in Maricopa and Pima Counties

Where are wages generally the highest? Maricopa or Pima County? What occupations are paid the most? Does employment size of a business have any effect on wage levels for the same occupation? What changes wage rates? Why are wage rates higher in one area than another? Do wage levels for the same occupations differ among the industries? Why? This article will present answers to these questions, using data and observations from reports over the last two to three years.

The source materials used are the Small Employer Wage Surveys for Maricopa and Pima counties, Employer Wage Surveys (Large) for Maricopa and Pima counties, Area Wage Surveys for the cities of Phoenix and Tucson, ES-202 Unemployment Insurance Reports, Current Employment Statistics, and 1980 Census data.

According to survey results, Maricopa County establishments generally give the highest remuneration for their workers' services, and large employers in both counties generally pay higher wages than do small employers. Two wage surveys that support these findings are conducted by state government.

Arizona Department of Economic Security
— Moving People Toward Self-Sufficiency

Table of Contents

Everything You Always Wanted to Know--About Wages in Maricopa and Pima Counties 1
The Arizona Labor Force in September . 11
Arizona Labor Force Statistics 12
Arizona Works! 17
Average Annual Pay 17
New Developments 20

LABOR MARKET INFORMATION
Site Code 733A
P.O. Box 6123
Phoenix, Arizona 85005-6123
(602) 255-3871

Barbara Keene, Editor
Linda Van Calcar, Word Processor

The Small Employer Wage Survey covers businesses with less than 100 employees and is conducted by the Research Administration of the Department of Economic Security (DES). The survey gathers and reports wages paid to workers in approximately 150 occupations within private establishments.

Begun in 1977 in nearly its present format and methodology, the collection of wage data (from over 1,500 small employers in 1986) is made for August of each year. Job titles in this survey account for over 70 percent of each county's nonagricultural wage and salary employment. The occupational selection, sample construction, and survey methodology are designed to give results that are representative of the occupational and industrial structures in Maricopa and Pima counties.

The Small Employer Wage Survey's wage information is reported for the industrial classifications of manufacturing; construction; transportation, communications, and public utilities (TCPU); wholesale trade; retail trade; finance, insurance, and real estate (FIRE); and services. Within these industries, the occupations are grouped into the categories of managerial, professional, technical, service, maintenance and production, clerical, and sales. A summary occupational table aggregates all the wage data for each of the two counties.

The other survey, called the Joint Governmental Salary Survey, covers establishments with generally 250 or more employees and is conducted by the Arizona Department of Administration. The results of this survey of large employers is also published by DES under the title Employer Wage Survey.

The large employer wage survey collects and reports wages of approximately 85 occupations for private and public firms, in size from 50 to 12,000 employees. Begun in nearly its present format and survey methodology in the early 1970s, the collection of wage statistics is also made for the month of August. According to the Department of Administration, "Employee population surveyed totaled approximately 313,250. The 78 benchmark positions apply to approximately 40,650 employees." The reported wage data are aggregated and reported by occupations gathered from 142 employers in Maricopa County and 33 in Pima.

The small and large surveys' sample and wage collection methodologies are similar. Both use random selection of establishments. Both use stratification of the number of an industry's employers within the sample by their employment participation within the county's total employment. The Small Employer Wage Survey uses the industries' past response rates to determine the number of firms from each industry to be included in the survey. Both surveys ask for a low, weighted average, and high wage paid for the occupations. The Small Employer Wage Survey uses the mail with unknown respondents, while the large one uses mail, personal visits, and follow up. Both surveys are edited in a similar manner.

Only the Small Employer Wage Survey collects data by industry. Of the six industrial classifications of firms reporting in 1986, those in construction and TCPU paid the highest average wage to their maintenance and production workers. Establishments in the services industry paid the lowest. The clerical category of occupations was also paid the highest average wage rate by firms in the construction and TCPU industries. Retail trade businesses paid the lowest for this cluster of occupations.

TABLE 1

WEIGHTED AVERAGE WAGE LEVELS - 1986

	All		Professional		Technical		Maintenance/ Production		Clerical	
	Maricopa	Pima	Maricopa	Pima	Maricopa	Pima	Maricopa	Pima	Maricopa	Pima
Small	$ 9.45	$ 8.13	$13.66	$10.55	$11.69	$ 9.64	$ 7.84	$7.38	$6.90	$6.30
Large	10.68	10.32	14.91	14.41	11.17	10.60	10.02	9.97	7.34	6.97

MARICOPA AND PIMA COMPARISONS

Results from both wage surveys for 1986 are shown in Table 1. The average wage rates of the reported employees are calculated for the occupational categories from the same 28 titles found in the small and large surveys for both counties.

Regardless of establishment size, one will generally earn higher wages in Maricopa than in Pima County. In either Maricopa or Pima County, working for a large firm generally will provide one with greater remuneration. The percentage differences of the occupational categories from Table 1 are given in Table 2.

The calculations for both of these tables are taken from totals of the averages of the same jobs or occupational titles added within a category. These resultant averages are as close an approximation to an occupational group's wage level as can be determined from the available information. Variations in duties and responsibilities, however, do exist within the same occupation in large and small establishments. The two surveys are very similar in methodology and have the same occupational titles, but the occupational descriptions differ.

Another distribution of 22 principal occupations with their weighted average wage levels by occupational cluster is in Table 3. Both surveys used the same methodology, occupational titles, and descriptions. Table 3 compares the categories of managerial, maintenance and production, and clerical.

There are two additional sources that show differences in wage levels between Maricopa and Pima counties. One source is the ES-202 Unemployment Insurance Report of the Department of Economic Security.

The ES-202 Unemployment Insurance Report is a quarterly summation by county of total wages and total employment by industry of all employers who are covered by the Unemployment Insurance program. Approximately

TABLE 2

1986 WEIGHTED AVERAGE WAGE LEVELS - MARICOPA COUNTY
PERCENT HIGHER THAN PIMA COUNTY

	All	Professional	Technical	Maintenance/ Production	Clerical
Small	16.2%	29.5%	21.3%	6.2%	9.5%
Large	3.5	3.5	5.4	0.5	5.3

1986 WEIGHTED AVERAGE WAGE LEVELS - LARGE EMPLOYERS
PERCENT HIGHER THAN SMALL EMPLOYERS

	All	Professional	Technical	Maintenance/ Production	Clerical
Maricopa	13.0%	9.2%	-4.4%	27.8%	6.4%
Pima	26.9	36.6	10.0	35.1	10.6

TABLE 3

1986 WEIGHTED AVERAGE WAGE LEVELS OF
LARGE EMPLOYERS AND SMALL EMPLOYERS (MARICOPA COUNTY)

	Managerial	%	Maintenance/ Production	%	Clerical	%
Large	$16.57		$9.49		$8.64	
Small	13.02		7.26		7.93	
Difference	$ 3.55	27.2	$2.23	30.7	$ .71	9.0

90 percent of the total nonagricultural employment in Arizona is covered.

In the third quarter of 1986, Maricopa County's average wage for all employees was 10.3 percent higher than Pima County's. In the private sector alone, Maricopa County's average wage was 13.5 percent more than Pima County's. Maricopa County's annual average wage also significantly led Pima County's wage level in 1984 and 1985.

Another wage study, the Area Wage Survey, also points up the difference in the counties' wage levels. This is a wage survey conducted by the U.S. Bureau of Labor Statistics (BLS) since 1965.

BLS surveys 223 establishments to collect the data. This survey covers businesses employing 50 or more workers in manufacturing, TCPU, wholesale trade, retail trade, FIRE, and selected services. The Phoenix and Tucson surveys, including 21 occupations found in clerical and maintenance and production classifications, showed Maricopa County's total wage rate 9.3 percent higher than Pima County's in June of 1986.

CHANGE OVER TIME

The only report in which wage level changes are calculated and reported over a period of time for the various industrial and occupational categories is the Small Employer Wage Survey. Movements of wage rates were calculated from the weighted average wage levels of the same occupations for which there were adequate numbers of respondents in 1985 and 1986.

According to the Small Employer Wage Survey of August 1986, with 151 occupations reported, the weighted average wage level for a typical employee of a small private firm in Maricopa County was $8.68 per hour and that of a maintenance and production worker, $8.42. The 5.2 percent overall increase in the average wage rate in Maricopa County from August 1985 to 1986 compares to a 4.0 percent rise between 1984 and 1985. Groups with large increases in their total weighted average rates for the year ending in August 1986 were the industries of services (10.5 percent), retail trade (9.3 percent), and FIRE (7.2 percent) and the occupational groups of technical (6.4 percent), service (5.9 percent), and maintenance and production (5.0 percent) workers. Low increases were recorded in the industries of wholesale trade (2.8 percent) and manufacturing (3.2 percent) and in the occupational groups of managerial (3.2 percent) and clerical (3.4 percent).

The weighted average wage rate of a small private business employee in the Tucson area, computed from wages of 115 occupations reported in the Pima County Small Employer Wage Survey, was $8.16 per hour in August of 1986. Workers in maintenance and production occupations averaged $7.15 per hour and those in clerical jobs received $6.35 per hour. Other average wage levels were the construction industry ($10.19), with its maintenance and production occupational category ($8.89); the manufacturing industry ($8.07), with its maintenance and production category ($7.19); the retail trade industry ($6.29); and the services industry ($7.11).

Overall, the weighted average wage for the same occupations increased 3.5 percent in Pima County from August 1985 to 1986, while the increase during the previous year had been 2.8 percent. The groups which led in

total weighted average rate increases for the year ending August 1986 were the industries of TCPU (12.7 percent), wholesale trade (9.3 percent), and services (8.5 percent) and the occupational categories of managerial (7.7 percent) and clerical (5.3 percent). Declines in the wage level were recorded in the FIRE industry (12.7 percent) and the professional group of occupations (7.0 percent).

The weighted average wage levels for the month of August 1986 of the industrial and occupational groups from the same occupations of Maricopa and Pima counties' private small-firm employees are in Table 4.

Changes in the average wage rates from August 1985 to 1986 for the industrial and occupational groups of the same occupations of Maricopa and Pima counties' private small-firm employees are shown in Table 5.

The large employer wage survey also found an overall wage rate increase for its 78 canvassed occupations from August 1985 to 1986. The total weighted average wages paid increased 4.4 percent in Maricopa County and 4.8 percent in Pima County.

The Area Wage Survey for Phoenix, Arizona, recorded for its 84 surveyed occupations a 6.1 percent increase in total mean wage

TABLE 4

1986 WEIGHTED AVERAGE WAGE LEVELS

Industry	Maricopa	Pima	Occupational Group	Maricopa	Pima
Construction	$11.72	$10.19	Managerial	$13.21	$11.88
Manufacturing	9.67	8.52	Professional	12.68	11.09
TCPU	9.44	8.61	Technical	12.02	10.11
Wholesale Trade	9.02	8.09	Service	4.92	4.79
Retail Trade	7.19	6.14	Maintenance and Production	8.54	7.67
FIRE	9.67	8.03	Clerical	6.99	6.35
Services	7.56	7.21	Sales	9.63	7.36
All Industries	9.20	8.22			

TCPU = Transportation, Communications, and Public Utilities
FIRE = Finance, Insurance, and Real Estate

TABLE 5

PERCENT CHANGE IN WEIGHTED AVERAGE WAGE LEVELS
FROM 1985 TO 1986

Industry	Maricopa	Pima	Occupational Group	Maricopa	Pima
Construction	5.7%	5.5%	Managerial	3.2%	7.7%
Manufacturing	3.2	4.0	Professional	4.6	-7.0
TCPU	6.5	12.7	Technical	6.4	6.5
Wholesale Trade	2.8	9.3	Service	5.9	3.7
Retail Trade	9.3	6.7	Maintenance/Production	5.0	3.1
FIRE	7.2	-12.7	Clerical	3.4	5.3
Services	10.5	8.5			
All Industries	5.2	3.5			

TCPU = Transportation, Communications, and Public Utilities
FIRE = Finance, Insurance, and Real Estate

levels from June 1985 to June 1986. The survey was not conducted in the Tucson area for 1985.

ANALYSIS OF MARICOPA/PIMA DIFFERENCES

Pima County's wage structure is lower than Maricopa's. A look at the economy, labor force makeup, population makeup, and employment picture in each area may give indications as to the reasons for the different wage levels.

The location of Pima County's major city, Tucson, may help to provide support of Pima's lower wage rate base. Unlike Maricopa County and Phoenix, which are situated in the middle of the state, Pima County borders Mexico. Low-wage workers are readily available, and most are willing to travel and relocate to an economy with higher wages.

Data from the 1980 Census show that Maricopa and Pima counties' civilian labor force compositions are quite different. While 88.6 percent of Maricopa County's labor is non-Hispanic, 81.4 percent in Pima County is in that group. Those of Hispanic heritage, therefore, represent 18.6 percent of Pima County's labor force and 11.4 percent of Maricopa County's. Historically, Hispanics have been employed in lower-paying jobs than non-Hispanics. This difference is almost evenly divided in the Hispanic breakdowns by sex. However, the total female civilian labor force composition in Pima County is only 0.3 percent higher than in Maricopa County. The total minority mix of Pima County is 7.6 percent higher than that of Maricopa County. Thus, the civilian labor force ethnic compositions of Maricopa and Pima counties are dissimilar. Table 6 gives the sex and minority breakdowns of the civilian labor force in Maricopa and Pima counties.

Maricopa and Pima counties' industrial employment patterns are also dissimilar. Historically, the manufacturing industry

TABLE 6

CIVILIAN LABOR FORCE BY SEX AND MINORITY STATUS - 1980

	Civilian Labor Force	
	Maricopa	Pima
Total (Both Sexes)	100.0%	100.0%
Non-Hispanic	88.6	81.4
White	83.7	76.1
Black	2.8	2.5
Native American	1.1	1.8
Asian/Pacific Islander	1.0	0.9
Other	0.1	0.1
Hispanic	11.4	18.6
Total Minorities	16.3	23.9
Total (Male)	57.8	57.5
Non-Hispanic	50.7	46.3
White	48.1	43.4
Black	1.5	1.4
Native American	0.6	1.0
Asian/Pacific Islander	0.5	0.5
Other	0.1	0.1
Hispanic	7.1	11.2
Total Minorities	9.7	14.1
Total (Female)	42.2	42.5
Non-Hispanic	37.9	35.1
White	35.6	32.7
Black	1.3	1.2
Native American	0.5	0.7
Asian/Pacific Islander	0.5	0.5
Other	0.1	0.1
Hispanic	4.3	7.4
Total Minorities	6.6	9.8

TABLE 7

EMPLOYMENT BY INDUSTRY - 1986

	Maricopa	Pima
Manufacturing	14.9%	13.1%
Mining	0.1	0.7
Construction	8.9	9.1
TCPU	5.0	3.9
Wholesale Trade	5.7	3.1
Retail Trade	19.4	19.3
FIRE	8.0	5.1
Services	24.8	25.5
Government	13.2	20.2

TCPU = Transportation, Communications, and Public Utilities
FIRE = Finance, Insurance, and Real Estate

has had the highest wage levels due to its strong profit motivation and background of unionization. Other high-paying industries are construction, mining, TCPU, and FIRE. Retail trade and services have historically contained occupations which give them low-based wage structures. Employment numbers from both Current Employment Statistics (CES) and the UI 202 reports point up the industrial strengths and weaknesses of Maricopa and Pima counties' economies. The CES industrial employment percentages for 1986 for Maricopa and Pima counties are in Table 7.

Maricopa County's comparative employment strengths lie in manufacturing, TCPU, wholesale trade, and FIRE. Pima County's relative strengths are in the industries of mining, services, and government. One would have to give the edge to Maricopa County in regard to a higher-wage-based economy, principally due to its manufacturing, FIRE, and TCPU sectors.

Occupational breakdowns from the 1980 Census are in Table 8. Pima County has higher percentages of managerial and professional, technical, service, and craft employees than does Maricopa County. Moreover, two low-wage occupational groups of workers are relatively small in Pima County--clerical and operators, fabricators, and laborers. Thus, the percentage distribution of the occupational groups does not give a strong indicator as to a relative high or low wage structure between Maricopa and Pima counties.

There is support for the idea that the larger the proportion of an area's population that is in the civilian labor force (either employed or actively looking for work) the stronger and more vital is that

TABLE 8

EMPLOYMENT BY OCCUPATION - 1980

	Maricopa	Pima
Managerial and Professional	27.0%	28.0%
Technical	3.4	3.8
Service	12.7	14.7
Craft	12.1	13.1
Operators, Fabricators, and Laborers	16.9	15.0
Office and Clerical	17.4	15.3
Sales	10.5	10.1

economy. Maricopa County has a higher proportion of population in the labor force--51.4 percent. Pima County's percentage for 1986 was 48.0 percent. One more statistic to look at before leaving this subject is that of civilian labor force participation rate. (The civilian labor force participation rate is a percentage of the population 16 and over in the civilian labor force.) The 1980 Census found 61.6 percent of the population 16 and over in Maricopa County participating in the civilian labor force and 57.8 percent in Pima County.

Lastly, how do the industries of Maricopa and Pima counties differ in their wage levels paid to the same occupations? The only source available for these data is the Small Employer Wage Survey. Table 9 gives the 1986 weighted average wage levels for occupations in small firms.

WHAT CHANGES WAGE LEVELS?

A change in the average wage level may result from the changing mix or number of employees in an occupation. This rate can also reflect the general health or strength of an industry or occupation. The average wage level of a job position is also affected by the changing duties and responsibilities of an occupation.

A decrease in the average wage rate may result from a significant addition of new hires at entry-wage levels in an industry or occupation. A growth industry or occupation would fall into this category. A situation, such as early retirement, can cause a decline in the number of higher paid workers within an industry or occupation, leading to a lower average wage rate. A scarcity of prospective employees, as occurs when the unemployment rate is low, may contribute to a rise in the average wage level. A large cutback of short-duration employees with lower wage rates will also result in a higher average wage level for the remaining work force. A declining industry or occupation would give this result. These conditions can and do affect the results of the wage surveys in the short term. The yearly average wage rates from these surveys, however, should reflect what is occurring in the county's economy, employment, work force supply and demand, and wage level conditions over the long term.

Also, economic conditions such as interest rates, foreign and local competition, governmental and union influences, local and national market conditions, consumer attitudes, and business outlook all affect wage movements. Growth or decline in the population of an area and shifts in its mix, as well as changes in the labor force, also have their effects on wage levels.

Everybody expects increases nowadays--in wages, in the price of a house, in the standard of living, in taxes and the cost of living, in the price of a new car, and in the amount of free time. We are just not ready to accept decreases. Nevertheless, some occupations will record average wage declines from year to year. These lower average wage levels are not aberrations due to survey error or faulty survey methodology. A longstanding survey, such as the Small Employer Wage Survey, tends to minimize error.

Thirty-six of the reported 151 occupations of private small employers in Maricopa County dropped in weighted average wage level for the year ending August 1986. More than one-half of these were service and maintenance and production occupations. Some of the job classifications that decreased in their weighted average wage rate from August 1985 to 1986 were: accounting clerk, automobile mechanic, cabinetmaker, cashier, cement mason/finisher, controller, credit manager, day care center worker, groundskeeper, legal secretary, machinist, personnel analyst/officer, production assembler, production supervisor, purchasing officer, and sheet metal worker.

A similar situation occurred in Pima County. There were 115 occupations in Pima County's 1986 wage survey report. Slightly over one-half of the county's 36 average wage rate decreases were in the occupational categories of maintenance and production and services. A partial list of the occupations with lower wages in 1986 includes: buyer, cabinetmaker, cement mason/finisher, custodial worker, electrician, housekeeping

TABLE 9

AVERAGE HOURLY WAGES BY OCCUPATION AND INDUSTRY - 1986

MARICOPA COUNTY	All Industry	Construction	Mfg.	TCPU	Wholesale Trade	Retail Trade	FIRE	Services
Accountant	$13.20	$11.85	$11.48	$13.13			$15.03	
Bookkeeper	8.44	8.97	8.65	7.87	$ 8.15	$ 8.35	8.09	$ 8.59
Branch Manager	20.21	23.51	25.64		16.31	16.38		
Clerk	5.98	6.30	5.47	6.17	6.41	4.82	6.23	5.87
EDP Computer Operator	8.00		6.85	6.99	8.40	6.86	7.70	8.81
Custodial Worker	5.47		5.21	6.70	5.87	4.86	5.55	5.47
Dispatcher	8.61	8.59		10.25	8.67			6.45
Forklift Operator	7.81	9.00	7.21	7.50	7.71			
General Salesperson	10.09	12.45	10.15	9.61	10.96	8.12		
Maintenance Mechanic	10.08	10.40	9.60	10.18				
Office Manager	11.94	11.16	10.89	11.92	11.95		14.02	
Painter	9.08	9.49	7.59					
Payroll Clerk	7.86	8.18	7.41		8.06	7.09		
Personnel Analyst/ Officer	12.63		14.12	13.29	13.51		14.75	11.72
Purchasing Officer	10.96	12.03	10.55	9.34			12.10	
Receptionist	5.97	6.08	5.80	6.01	6.03	5.32	6.32	5.85
Sales Manager	15.48	16.96	18.71			13.85		13.43
Secretary	7.35	7.51	7.04	6.34	6.92	7.03	7.37	7.58
Sheet Metal Worker	10.14	10.80	9.21					
Shipping/Receiving Clerk	6.36		6.49		6.19	6.51		
EDP Systems Analyst	18.28		18.38		12.84			19.95
Truck Driver-Light	6.84	7.43	6.55	8.62	6.07	6.18		5.37

PIMA COUNTY	All Industry	Construction	Mfg.	TCPU	Wholesale Trade	Retail Trade	FIRE	Services
Accountant	$10.68	$10.53	$ 9.35	$ 9.87			$11.47	
Bookkeeper	7.40	7.68	7.72	9.25	$ 7.12	$ 6.65	6.87	$ 7.45
Branch Manager	16.48	20.39	14.02		17.41	12.85		
Clerk	5.65	6.06	5.22	7.33	6.13	4.77	4.91	5.50
EDP Computer Operator	7.31						7.36	8.61
Custodial Worker	5.02		5.01	6.10	5.13	5.15	5.69	4.69
Dispatcher	7.38	8.71		6.94				
Forklift Operator	7.53	8.01	6.95					
General Salesperson	7.71		7.25	7.33	9.95	5.43		
Maintenance Mechanic	9.01	8.74	7.51	11.06				
Office Manager	10.22	10.35	9.37	11.50	10.31		9.73	
Painter	7.38	7.42	6.70					
Purchasing Officer	11.52	14.00	9.81					
Receptionist	5.43	5.37	5.23	6.02	5.48	4.70	5.32	5.59
Sales Manager	13.57	17.19	14.77			13.33		11.51
Secretary	6.51	6.45	6.28		5.44	6.30	5.69	6.87
Sheet Metal Worker	9.45	9.39	10.34					
Shipping/Receiving Clerk	5.81		5.68		6.44	4.66		
Truck Driver-Light	5.61	5.51	6.11	6.47	4.52	4.94		6.13

Mfg. = Manufacturing TCPU = Transportation, Communications, and Public Utilities
FIRE = Finance, Insurance, and Real Estate

cleaner, legal secretary, machinist, office manager, painter, personnel analyst/officer, plumber, production assembler, purchasing officer, and sales clerk.

Five of the 80 occupations in the survey of large employers in Maricopa County recorded lower average wage levels from August 1985 to 1986. These occupations were clerical supervisor, drafting technician, laboratory technician, stores supervisor, and survey instrument technician. However, 20 of the 80 surveyed occupations in Pima County showed decreases. Some of these 20 job classifications were: automotive service worker, clerk, computer programmer, cook, custodial worker, data entry supervisor, EDP systems analyst, laborer, licensed practical nurse, nursing assistant, painter, stores supervisor, and typist.

In Table 10 are the weighted average wage levels for the same occupations from the large and small employer wage surveys of Maricopa and Pima counties for August 1986. A review of this list reveals larger differences in average wage rates between large and small employers in the higher-skilled positions and smaller variations in the lower-skilled ones. This has generally been the case over the years.

In addition to the fact that wage levels differ because of the degree of constraint that an employer has as a result of profit position, union pressure, available monies, and occupational supply and demand, there are basic differences within an occupation's duties due to the job's specific demands, responsibilities, and difficulty. This situation is illustrated in the extent of the wage ranges at the higher-skilled occupational levels, and also by the higher wage levels in the producing industries and in the larger establishments.

TABLE 10

AVERAGE HOURLY WAGES BY OCCUPATION - 1986

Occupation	Maricopa		Pima	
	Small	Large	Small	Large
Accountant	$13.20	$12.77	$10.68	$11.73
Auto Mechanic	9.25	10.96	9.17	11.65
Buyer	11.46	12.44	7.33	12.11
Carpenter	11.03	12.15	8.98	11.83
Cashier	4.48	6.30	4.39	6.81
Civil Engineer	23.08	18.83	11.93	16.92
Clerk	5.98	6.16	5.65	5.57
Cook	5.65	7.10	5.01	6.26
Custodial Worker	5.47	6.59	5.02	5.36
Drafter	10.59	10.65	8.55	10.91
EDP Programmer	14.69	14.95	13.41	13.34
EDP Systems Analyst	18.28	17.12	16.20	15.64
Electrician	9.79	14.83	10.13	12.62
Electronic Technician	9.78	10.42	6.95	10.32
Groundskeeper	5.32	7.42	5.54	7.15
Laborer	7.24	8.61	6.19	9.33
Legal Secretary	9.55	10.39	8.64	9.00
Licensed Practical Nurse	8.21	8.08	6.81	7.57
Nursing Assistant	4.22	5.44	4.40	5.50
Painter	9.08	12.31	7.38	11.17
Personnel Analyst	12.63	13.88	10.90	12.28
Plumber	10.94	11.87	10.28	12.79
Secretary	7.35	8.00	6.51	7.33
Switchboard Operator	5.93	6.23	4.57	6.17
Welder	9.31	12.77	10.21	13.46

Glede Kohler

The Arizona Labor Force in September

Continuing its decline, the unemployment rate dropped to 5.7 percent in September, following the national trend. Paradoxically, the dip in the unemployment rate is not necessarily good news. Both the labor force and employment showed the largest gains of the year. However, this was the result of school faculty and staff returning to work. Total unemployment fell for the third consecutive month, but based on the slowed rate of job growth, this downtrend can be explained by discouraged workers--those who leave the labor force and the ranks of the unemployed because of the difficulty in finding work. Also, the strong job growth in neighboring states is enticing Arizona workers to seek employment opportunities in California and Nevada. This is in line with the reduced population growth this year.

After accounting for school employment, September job growth was minimal. Wage and salary employment shot up by 27,300. However, all but 200 of this gain was school-related. For the fourth month, Arizona created jobs slower than the national average. Despite the below-average employment gains, a recession is not imminent. Job growth, while sluggish, is still positive, personal income is increasing faster than anticipated, and inflation remains moderate.

Construction continues to be the weakest sector in the economy. Another 1,000 jobs were lost in September, for a total of 14,000 jobs lost over the last 12 months. Construction employment is now at its lowest level since December 1984. A turnaround for this industry is not in sight. Interest rates are likely to stay up as the Federal Reserve sustains tighter monetary policy. Unless interest rates drop, single-family housing construction will continue to slow. The glut of apartments and commercial office space is another hindrance to recovery of the construction industry. High vacancy rates paired with slow absorption indicate that there is over a two-year supply of apartments and office space on the market in the metropolitan areas.

After three straight months of expanding, manufacturing employment fell by 200 in September. This drop-off is mostly a result of manufacturers nearing completion of their contracts for defense-related products. With the tight budget situation, the outlook for this industry is not positive. On the other hand, the semiconductor producers are becoming more competitive as the value of the dollar drops. It is forecast that the gain in employment by these producers in the near future will more than compensate the loss by defense-related producers.

Seasonal growth in trade and services is beginning as businesses gear up for the influx of winter visitors and the holidays. Retail trade added 1,500 jobs mainly in apparel, general merchandise, and food stores. Services also grew by 1,500 with 1,300 of these jobs in hotels. At this early stage, it is difficult to determine if the winter tourism season will be strong. Additional demand for hotel and lodging space is often used to forecast this industry. It is estimated that demand for resort and hotel space in the metropolitan areas will increase more than 20 percent in 1987, meaning a good tourism season.

The mining industry has recently shown some strength as the price of copper rises and demand exceeds the short-term supply. Mining employment grew by 100 in September and is up 300 over the last 12 months. With mining operations more cost-effective and capital-intensive, a return to the high employment level of the early 1980s is not likely.

Sluggish economic growth can be expected through year-end. With slowed job growth, the labor market will tighten in the coming months causing the unemployment rate to rise. The outlook for 1988 does not see conditions improving as the national economy falters, the construction industry continues its slide, and population growth slows.

Rosemary Reardon

September 1987 (in thousands)

	ARIZONA					MARICOPA COUNTY					PIMA COUNTY				
	Sep.* 1987	Aug. 1987	Sep. 1986	-- Amt Change -- Aug. to Sep.	1986 to 1987	Sep.* 1987	Aug. 1987	Sep. 1986	-- Amt Change -- Aug. to Sep.	1986 to 1987	Sep.* 1987	Aug. 1987	Sep. 1986	-- Amt Change -- Aug. to Sep.	1986 to 1987
TOTAL CIVILIAN LABOR FORCE**	1636.6	1611.6	1596.1	+25.0	+40.5	1017.7	1001.7	986.0	+16.0	+31.7	314.4	307.2	308.9	+7.2	+5.5
Total Unemployment	92.6	97.3	109.3	-4.7	-16.7	47.9	48.2	55.9	-0.3	-8.0	14.4	14.2	17.2	+0.2	-2.8
Rate	5.7	6.0	6.8	---	---	4.7	4.8	5.7	---	---	4.6	4.6	5.6	---	---
Rate (Sea. Adj.)***	5.7	5.8	6.9	---	---	4.7	4.7	5.7	---	---	4.6	4.6	5.6	---	---
Total Employment	1544.0	1514.3	1486.8	+29.7	+57.2	969.8	953.5	930.1	+16.3	+39.7	300.0	293.0	291.7	+7.0	+8.3

The Above Labor Force Statistics Should Not Be Used for Economic Assistance Programs

NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY PLACE OF WORK															
TOTAL WAGE AND SALARY	1369.6	1342.3	1351.7	+27.3	+17.9	902.4	886.0	886.3	+16.4	+16.1	242.1	235.8	241.5	+6.3	+0.6
Manufacturing	186.5	186.7	187.0	-0.2	-0.5	135.2	135.6	133.5	-0.4	+1.7	30.5	30.5	31.7	+0.0	-1.2
Durable Goods	144.5	144.9	146.0	-0.4	-1.5	106.1	106.6	105.6	-0.5	+0.5	25.0	25.0	26.4	+0.0	-1.4
Stone, Clay and Glass	7.6	7.6	8.1	+0.0	-0.5	4.8	4.8	5.2	+0.0	-0.4					
Primary and Fabricated Metals	15.7	15.6	16.3	+0.1	-0.6	10.5	10.5	10.9	+0.0	-0.4					
Primary Metals	7.3	7.2	7.6	+0.1	-0.3										
Fabricated Metals	8.4	8.4	8.7	+0.0	-0.3										
Machinery	64.4	64.5	65.4	-0.1	-1.0	51.4	51.5	51.8	-0.1	-0.4					
Other Durable Goods	56.8	57.2	56.2	-0.4	+0.6	39.4	39.8	37.7	-0.4	+1.7					
Aircraft and Missiles	26.7	27.2	27.4	-0.5	-0.7										
Lumber and Wood Products (Except Furniture)	8.4	8.3	8.1	+0.1	+0.3										
All Other Durable Goods	21.7	21.7	20.7	+0.0	+1.0										
Nondurable Goods	42.0	41.8	41.0	+0.2	+1.0	29.1	29.0	27.9	+0.1	+1.2	5.5	5.5	5.3	+0.0	+0.2
Food and Kindred Products	9.4	9.3	9.7	+0.1	-0.3	6.2	6.2	6.2	+0.0	+0.0					
Apparel	4.4	4.4	4.6	+0.0	-0.2	3.1	3.1	3.1	+0.0	+0.0					
Printing and Publishing	16.2	16.4	15.4	-0.2	+0.8	11.3	11.6	10.9	-0.3	+0.4					
All Other Nondurable Goods	12.0	11.7	11.3	+0.3	+0.7	8.5	8.1	7.7	+0.4	+0.8					
Mining and Quarrying	11.2	11.1	10.8	+0.1	+0.4	0.6	0.6	0.6	+0.0	+0.0	1.7	1.6	1.6	+0.1	+0.1
Copper Mining	8.5	8.4	8.1	+0.1	+0.4										
Other Mining and Quarrying	2.7	2.7	2.7	+0.0	+0.0										
Construction	102.9	103.9	113.9	-1.0	-11.0	68.9	69.5	78.1	-0.6	-9.2	20.6	20.8	22.4	-0.2	-1.8
Trans., Communications, and Public Utilities	70.6	70.6	67.7	+0.0	+2.9	48.0	48.0	45.1	+0.0	+2.9	9.8	9.8	9.8	+0.0	+0.0
Transportation	31.9	31.9	31.1	+0.0	+0.8	22.1	22.1	20.8	+0.0	+1.3	4.8	4.8	4.9	+0.0	-0.1
Communications and Public Utilities	38.7	38.7	36.6	+0.0	+2.1	25.9	25.9	24.3	+0.0	+1.6	5.0	5.0	4.9	+0.0	+0.1
Trade	331.3	329.4	324.0	+1.9	+7.3	225.9	224.9	220.3	+1.0	+5.6	54.5	54.1	53.8	+0.4	+0.7
Wholesale Trade	63.9	63.5	63.2	+0.4	+0.7	51.2	51.0	50.8	+0.2	+0.4	7.6	7.5	7.3	+0.1	+0.3
Retail Trade	267.4	265.9	260.8	+1.5	+6.6	174.7	173.9	169.5	+0.8	+5.2	46.9	46.6	46.5	+0.3	+0.4
General Merchandise and Apparel	43.3	42.7	41.2	+0.6	+2.1	28.6	28.1	26.5	+0.5	+2.1	7.2	7.0	7.1	+0.2	+0.1
Food Stores	42.7	42.1	40.9	+0.6	+1.8	27.9	27.4	26.7	+0.5	+1.2	7.0	6.9	6.8	+0.1	+0.2
Automotive and Service Stations	32.2	32.2	31.7	+0.0	+0.5	20.2	20.4	20.2	-0.2	+0.0	5.4	5.4	5.4	+0.0	+0.0
Eating and Drinking Places	93.8	93.7	92.9	+0.1	+0.9	59.5	59.8	59.0	-0.3	+0.5	17.8	17.7	17.6	+0.1	+0.2
Other Retail Trade	55.4	55.2	54.1	+0.2	+1.3	38.5	38.2	37.1	+0.3	+1.4	9.5	9.6	9.6	-0.1	-0.1
Finance, Insurance, and Real Estate	91.4	91.5	90.2	-0.1	+1.2	72.0	72.0	71.2	+0.0	+0.8	12.8	12.8	12.4	+0.0	+0.4
Services and Miscellaneous	338.6	337.1	328.4	+1.5	+10.2	228.4	227.0	219.8	+1.4	+8.6	62.6	62.1	61.3	+0.5	+1.3
Hotels and Other Lodging Places	34.0	32.7	31.0	+1.3	+3.0	18.7	17.8	16.6	+0.9	+2.1	5.9	5.5	5.5	+0.4	+0.4
Business Services	74.7	74.6	74.2	+0.1	+0.5	60.1	59.8	59.5	+0.3	+0.6	11.0	11.1	11.1	-0.1	-0.1
Health Services	84.7	84.4	81.4	+0.3	+3.3	55.6	55.2	53.1	+0.4	+2.5	17.9	18.0	17.3	-0.1	+0.6
Other Services	145.2	145.4	141.8	-0.2	+3.4	94.0	94.2	90.6	-0.2	+3.4	27.8	27.5	27.4	+0.3	+0.4
Government	237.1	212.0	229.7	+25.1	+7.4	123.4	108.4	117.7	+15.0	+5.7	49.6	44.1	48.5	+5.5	+1.1
Federal	43.1	43.3	41.7	-0.2	+1.4										
State and Local	194.0	168.7	188.0	+25.3	+6.0										
School	111.6	84.5	108.6	+27.1	+3.0										

* Preliminary
** Labor force, unemployment, and employment are reported by place of residence.
*** Normal seasonal variations have been eliminated to reflect underlying economic trends.
NOTE: Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

-- Prepared by Arizona Department of Economic Security, Research Administration (CPS, 1/87)

Nonmetropolitan Counties
Labor Force and Employment
September 1987

	Apache	Cochise	Coconino	Gila	Graham	Green-lee	La Paz
TOTAL CIVILIAN LABOR FORCE*.	15,375	36,725	42,475	13,075	8,300	3,325	4,750
Total Unemployment	1,825	2,600	2,875	1,375	725	275	450
Rate	11.9%	7.1%	6.8%	10.5%	8.7%	8.3%	9.5%
Rate (Seas. Adj.)**. . . .	12.8%	7.3%	7.8%	10.7%	8.9%	8.8%	-INA-
Total Employment	13,550	34,125	39,600	11,700	7,575	3,050	4,300
THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED FOR ECONOMIC ASSISTANCE PROGRAMS							
TOTAL WAGE AND SALARY. . . .	15,825	24,475	37,800	10,650	4,900	3,075	2,975
Manufacturing.	875	1,625	2,800	1,475	200	25	100
Mining and Quarrying	25	100	75	1,275	0	1,575	0
Construction	1,375	1,225	1,975	275	200	450	175
Trans., Comm., & Pub. Util..	2,025	1,400	2,475	425	150	25	100
Trade.	1,425	5,450	8,550	2,250	1,275	225	1,025
Fin., Insur., & Real Estate.	325	650	875	300	125	25	100
Services and Miscellaneous .	4,650	4,050	9,650	2,025	875	150	675
Government	5,125	9,975	11,400	2,625	2,075	600	800

	Mohave	Navajo	Pinal	Santa Cruz	Yavapai	Yuma
TOTAL CIVILIAN LABOR FORCE*.	30,375	26,975	37,275	9,775	36,575	39,575
Total Unemployment	2,100	2,500	3,800	1,600	1,750	8,475
Rate	6.9%	9.3%	10.2%	16.4%	4.8%	21.4%
Rate (Seas. Adj.)**. . . .	7.1%	10.6%	10.0%	14.4%	5.1%	-INA-
Total Employment	28,275	24,475	33,475	8,175	34,825	31,100
THE ABOVE LABOR FORCE STATISTICS SHOULD NOT BE USED FOR ECONOMIC ASSISTANCE PROGRAMS						
TOTAL WAGE AND SALARY. . . .	20,350	20,425	28,175	8,150	23,525	24,750
Manufacturing.	2,625	1,925	3,650	1,300	2,525	1,725
Mining and Quarrying	425	1,125	3,625	0	600	50
Construction	1,350	1,150	1,175	325	2,050	1,625
Trans., Comm., & Pub. Util..	1,125	1,750	1,100	475	875	850
Trade.	5,925	3,875	4,750	2,925	6,300	6,825
Fin., Insur., & Real Estate.	900	375	750	300	950	975
Services and Miscellaneous .	4,300	5,100	3,900	1,250	5,100	5,875
Government	3,700	5,125	9,225	1,575	5,125	6,825

*Adjusted to the Current Population Survey (CPS) to reflect place of residence.
**Seasonal adjustment not applicable for economic assistance programs.

NOTE--Series for Yuma and La Paz counties start January 1983. Data are not comparable to any past series.

Prepared in conjunction with the U.S. Department of Labor, Bureau of Labor Statistics.

Arizona Labor Force and Employment for Economic Assistance Programs September 1987

County	Civilian Labor Force	Employment	Unemployment	Rate
Statewide	1,636,684	1,544,038	92,646	5.7%
Apache	15,373	13,552	1,821	11.8
Cochise	36,731	34,125	2,606	7.1
Coconino	42,483	39,609	2,874	6.8
Gila	13,056	11,692	1,364	10.4
Graham	8,303	7,579	724	8.7
Greenlee	3,337	3,053	284	8.5
La Paz	4,740	4,297	443	9.3
Maricopa	1,017,724	969,826	47,898	4.7
Mohave	30,364	28,267	2,097	6.9
Navajo	26,990	24,478	2,512	9.3
Pima	314,382	299,979	14,403	4.6
Pinal	37,292	33,487	3,805	10.2
Santa Cruz	9,758	8,170	1,588	16.3
Yavapai	36,581	34,834	1,747	4.8
Yuma	39,570	31,090	8,480	21.4

These figures are the only official BLS labor statistics to be used for revenue sharing purposes. They are not designed to be used as economic indicators. Note: Series for Yuma and La Paz counties start January 1983. Data are not comparable to any past series.

Arizona Unemployment Insurance Activities August 1987

	August 1987	July 1987	August 1986	% Change From One Year Ago
Claimants Served*	33,970	35,551	34,440	-1.4%
Average Weeks Unemployed**	9.5	8.4	9.4	1.5%
Benefits Paid*	$ 12,354,841	$ 14,914,841	$ 12,979,766	-4.8%
Trust Fund Balance	$422,578,042	$407,406,358	$389,574,307	8.5%

*All Programs **UI Only

Estimated Hours and Earnings of Production Workers in Selected Industries Arizona

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	SEP.* 1987	AUG. 1987	SEP. 1986	SEP.* 1987	AUG. 1987	SEP. 1986	SEP.* 1987	AUG. 1987	SEP. 1986
FOR THE STATE OF ARIZONA									
Manufacturing	402.20	408.18	408.36	40.1	40.9	41.0	10.03	9.98	9.96
Aircraft & Missiles	529.94	526.23	INA	42.6	42.2	INA	12.44	12.47	INA
Food & Kindred Products	397.54	402.86	414.67	42.7	43.6	42.4	9.31	9.24	9.78
Primary Metals	454.65	466.28	487.58	35.0	36.6	39.1	12.99	12.74	12.47
Machinery	396.76	394.21	360.91	39.4	39.9	38.6	10.07	9.88	9.35
Copper Mining	503.66	492.48	506.17	40.1	40.6	40.3	12.56	12.13	12.56
Construction	406.21	418.96	433.78	35.2	36.4	36.3	11.54	11.51	11.95
Utilities	600.50	620.06	622.80	41.5	43.0	43.1	14.47	14.42	14.45
Retail Trade**	257.56	248.83	236.80	33.8	33.4	32.0	7.62	7.45	7.40
Wholesale Trade	387.69	390.06	383.60	39.2	39.4	40.0	9.89	9.90	9.59

Estimated Hours and Earnings of Production Workers in Selected Industries Maricopa County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	SEP.* 1987	AUG. 1987	JULY 1987	SEP.* 1987	AUG. 1987	JULY 1987	SEP.* 1987	AUG. 1987	JULY 1987
FOR MARICOPA COUNTY									
Manufacturing	424.13	438.48	426.21	40.9	41.8	41.1	10.37	10.49	10.37
Construction	420.50	427.21	441.97	35.1	35.9	36.8	11.98	11.90	12.01
Retail Trade**	277.49	274.12	277.23	34.3	33.8	34.1	8.09	8.11	8.13
Wholesale Trade	390.33	393.90	390.87	38.8	39.0	38.7	10.06	10.10	10.10

Estimated Hours and Earnings of Production Workers in Selected Industries Pima County

INDUSTRY	AVERAGE WEEKLY EARNINGS			AVERAGE WEEKLY HOURS			AVERAGE HOURLY EARNINGS		
	SEP.* 1987	AUG. 1987	JULY 1987	SEP.* 1987	AUG. 1987	JULY 1987	SEP.* 1987	AUG. 1987	JULY 1987
*****FOR PIMA COUNTY*****									
Manufacturing	352.43	356.66	364.17	38.1	38.6	38.7	9.25	9.24	9.41
Copper Mining	526.26	511.24	511.66	41.8	41.7	41.7	12.59	12.26	12.27
Construction	359.20	367.37	363.91	35.6	36.7	36.5	10.09	10.01	9.97
Utilities	561.70	579.83	562.38	41.0	42.2	42.0	13.70	13.74	13.39

* Preliminary
** Excludes eating and drinking places.
NOTE--These estimates are based on a sample of full and part-time production and related employees whose payroll and hours are reported for the pay period which includes the 12th of the month. Prepared in cooperation with the U.S. Department of Labor, Bureau of Labor Statistics.

--Arizona Department of Economic Security, Research Administration. (1972 SIC, 1/87)

Arizona Works!

In what is being characterized as Arizona's answer to welfare reform, the Department of Economic Security (DES), together with the Department of Education and various Job Training Partnership Act (JTPA) agencies throughout Arizona, is implementing a comprehensive employment and training delivery system to prepare Aid to Families with Dependent Children (AFDC) applicants and recipients to obtain jobs and become self-sufficient.

What is unique about ARIZONA WORKS!? Traditional welfare programs have all too often failed to recognize that welfare dependency can be prevented by strengthening the family and by providing opportunities for education, training, and work. ARIZONA WORKS! will target three groups of AFDC applicants and recipients: 1) Teen parents, 2) Long-term AFDC recipients, and 3) Older AFDC recipients whose youngest child will turn 16 and soon disqualify them from welfare. A major aim of ARIZONA WORKS! is to focus on the AFDC client who traditionally has an extended period of time on welfare and to break this cycle of dependency.

Using existing resources, the state will implement comprehensive service programs in the Phoenix and Tucson metropolitan areas in DES offices. In Phoenix, the ARIZONA WORKS! office will be located at 1224 South Seventh Avenue. In Tucson, ARIZONA WORKS! staff have been assigned to each of the Job Service offices. The balance of the state will be served through cooperative arrangements between the DES Job Service and JTPA agencies.

How does ARIZONA WORKS operate? Briefly, in Maricopa and Pima counties, the model will focus on specific client populations who are either required to register for work programs (mandatory registrant) or who live in designated areas (established by zip code). During the initial visit to an ARIZONA WORKS! office, the client's skills and abilities will be assessed. Specific orientation programs for developing or enhancing job-ready skills, together with follow-up programs, are part of the job placement component of ARIZONA WORKS!. Target group applicants will be served by the "case management" model. Using a time-proven method of individualized client service, the AFDC client will be guided and prepared for transition away from welfare dependency. While the philosophy of ARIZONA WORKS! is positive, clients who fail to comply with the requirements of the program will face sanctions which could impact their receipt of benefits.

AFDC recipients and applicants who reside in Maricopa and Pima counties, but outside designated areas, will be assisted by another service delivery model. In this system, the primary service will be to assist as many individuals as possible to secure employment. The DES Family Assistance Administration (FAA) will refer AFDC applicants and recipients to the Job Service for this purpose. Individuals requiring training in order to become employable will be referred to JTPA to access training opportunities. Finally, in the balance of state and in recognition of special problems faced in these areas, JTPA agencies will fulfill dual roles of providing training and job placement when there are no Job Service offices within the rural community.

DES is sincerely interested in working with the employer community and hearing its comments and suggestions. If you would like to be a part of Arizona's team committed to welfare reform, or wish to visit an ARIZONA WORKS! office, please contact Gloria Young at (602) 255-1783 or Ruby Smalls at (602) 255-4020.

Ben Levine
Employment and Training Administration

Average Annual Pay

Alaska had the highest average annual pay ($28,442) of any state in the nation in 1986. South Dakota had the lowest--$14,477. Arizona ranked 22nd among all of the states

and the District of Columbia, according to recently released preliminary data from the U.S. Bureau of Labor Statistics.

Arizona's average annual pay of $18,870 in 1986 represents a 4.6 percent increase over 1985. Only ten states had a percent change greater than Arizona's. The average change for the United States was 4.0 percent, with a range of -0.9 percent for Alaska and 6.6 percent for Massachusetts.

Average annual pay varies widely by industry. Workers tend to earn the highest pay in mining and the lowest in retail trade. This held true for Arizona in 1986. Mining employees averaged $30,217. That figure, however, was a decrease of 1.5 percent from 1985. All of the other industries showed increases, leading to a 4.5 percent change overall in Arizona's private-sector employee pay.

Retail trade employees in Arizona had average annual pay of only $11,492. These workers, however, are often part-time employees. That situation leads to an overall low annual pay for the industry because of the method of calculating these data. Average annual pay is computed by dividing total annual payrolls of employers by the average monthly employment.

These data are compiled from reports submitted by employers covered by Unemployment Insurance (UI) laws for over 98 million workers nationwide. Included in the payroll data are bonuses, the cash value of meals and lodging when supplied, tips and other gratuities, and employer contributions to certain deferred compensation plans such as 401(k) plans.

Major exclusions from UI coverage include most agricultural workers on small farms, all members of the Armed Forces, elected officials in most states, most railroad employees, most domestic workers, most student workers at schools, employees of certain small nonprofit organizations, self-employed individuals, and all unpaid family members.

Certain factors should be taken into consideration when comparing average annual pay levels between states or industries. Average annual pay is affected by the number of individuals in high-paying and low-paying occupations, by the ratio of full-time to part-time workers, and by the fact that an individual may not be employed by the same employer all year or may work for more than one employer.

Barbara Keene

ARIZONA AVERAGE ANNUAL PAY

	1985	1986	1985-1986 Change
Private Industry	$17,555	$18,351	4.5%
Mining	30,682	30,217	-1.5
Construction	19,732	20,598	4.4
Manufacturing	23,524	24,786	5.4
Transportation, communications, and public utilties	24,237	24,954	3.0
Wholesale trade	21,899	22,849	4.3
Retail trade	11,123	11,492	3.3
Finance, insurance, and real estate	20,873	22,582	8.2
Services	15,487	16,337	5.5
Government	20,528	21,559	5.0

SOURCE: News, U.S. Bureau of Labor Statistics, USDL 87-377, September 1, 1987.

STATES RANKED BY 1986 ANNUAL PAY

Rank	State	1985 Annual Pay	1986 Annual Pay	1985-1986 Change
1	Alaska	$28,694	$28,442	-0.9%
* 2	District of Columbia	26,160	27,137	3.7
3	New York	21,901	23,200	5.9
4	Michigan	21,884	22,720	3.8
5	Connecticut	21,226	22,516	6.1
6	New Jersey	21,077	22,309	5.8
7	California	20,948	21,995	5.0
8	Illinois	20,600	21,452	4.1
9	Massachusetts	19,627	20,925	6.6
10	Colorado	19,570	20,275	3.6
11	Maryland	------	20,121	----
	UNITED STATES	**19,189**	**19,966**	**4.0**
12	Texas	19,616	19,934	1.6
13	Ohio	19,433	19,902	2.4
14	Washington	18,964	19,645	3.6
15	Delaware	19,146	19,639	2.6
16	Minnesota	18,818	19,630	4.3
17	Pennsylvania	18,650	19,404	4.0
18	Indiana	18,501	19,024	2.8
19	Virginia	18,264	18,972	3.9
20	Wyoming	18,950	18,969	0.1
21	Missouri	18,338	18,915	3.1
22	**ARIZONA**	**18,037**	**18,870**	**4.6**
23	Georgia	17,916	18,746	4.6
24	Nevada	18,179	18,739	3.1
25	West Virginia	18,005	18,405	2.2
26	Oklahoma	18,196	18,345	0.8
27	Oregon	17,837	18,322	2.7
28	New Hampshire	17,205	18,303	6.4
29	Louisiana	18,216	18,290	0.4
30	Wisconsin	17,594	18,202	3.5
31	Hawaii	17,336	18,101	4.4
32	Kansas	17,334	17,934	3.5
33	Utah	17,577	17,863	1.6
34	Rhode Island	16,864	17,733	5.2
35	Florida	16,961	17,679	4.2
36	Tennessee	16,987	17,661	4.0
37	Alabama	17,023	17,638	3.6
38	Kentucky	16,941	17,357	2.5
39	New Mexico	16,989	17,301	1.8
40	North Carolina	16,226	17,001	4.8
41	Vermont	16,023	16,857	5.2
42	Idaho	16,358	16,602	1.5
43	South Carolina	15,948	16,600	4.1
44	Iowa	16,097	16,598	3.1
45	Maine	15,428	16,326	5.8
46	Arkansas	15,553	16,162	3.9
47	Nebraska	15,616	16,106	3.1
48	Montana	15,932	16,085	1.0
49	North Dakota	15,588	15,778	1.2
50	Mississippi	14,951	15,420	3.1
51	South Dakota	13,988	14,477	3.5

SOURCE: News, U.S. Bureau of Labor Statistics, USDL 87-377, September 1, 1987.

New Developments

"New Developments" is featured each month as a service to employers and job seekers. It is a compilation of public announcements of the more significant new construction, grand openings, major hirings and layoffs, and other employer events that have special significance for Arizona labor markets. The announcements are paraphrased and otherwise edited from articles published in newspapers and other periodicals from throughout the state. "New Developments" is limited to space available, and no attempt is made to compile an exhaustive list of all such events that have occurred during the month.

EDUCATION - CyCare Systems Inc. of Phoenix has established the CyCare Unity Fund to provide scholarships for financially disadvantaged students, with special emphasis on minorities. Intended to celebrate the company's 20th anniversary, the fund has an initial endowment goal of $1 million. Applications will be accepted January 1, 1988. More information can be requested from Carol Smith, Administrative Assistant, CyCare Systems Inc., 4343 East Camelback Road, Suite 320, Phoenix, Arizona 85018.

TRADE - Annual shopping center retail sales in Arizona total $11.6 billion and account for 84 percent of nonautomotive retail sales in the state, according to the International Council of Shopping Centers. The shopping centers provide 171,000 jobs or about 13 percent of Arizona's employment, the highest percentage of any state. Arizona has 680 shopping centers with an additional 61 under construction.

Eateries Inc., based in Oklahoma City, is planning to open from eight to ten Garfield's Restaurant and Pub locations in Arizona. With turn-of-the-century furnishings, the restaurants will feature a 75-item menu with sandwiches, prime rib, and seafood; full bar service; and seating capacity of 140 to 175.

Great Western Systems Inc. will be putting in a $9 million autoplex on 26 acres at 56th Street and Warner in Tempe. Expected to be completed by next summer, the autoplex will house more than 25 firms offering auto-related services and products. The anchor tenant will be an auto-auction amphitheater.

Ground will soon be broken for an $11 million retail center, Glendale Galleria, being built on 19.4 acres northeast of 59th and Peoria avenues. The 200,000-square-foot center is scheduled for completion within 10 to 12 months after construction begins.

A $10 million renovation and expansion has begun on the Goldwaters flagship store at Scottsdale Fashion Square, Camelback and Scottsdale roads. Expected to be completed by late 1988, the project includes the construction of a 96,000-square-foot addition and renovation of the interior and exterior of the existing building.

Arthur's Apparel Associates Inc. is planning to open its third and fourth Phoenix-area ClotheSmart stores this fall and up to nine more in Phoenix and Tucson through 1988. Specializing in junior and misses brand-name apparel, each store will employ 25 to 30 employees.

Allen Hospitality Corp. of Salt Lake City will soon be opening a Mullboon's restaurant at 1538 East Southern in Tempe. Three additional sites are also being planned for the Valley, including two in Scottsdale and one in Mesa. Each restaurant will employ from 90 to 110 employees and will feature a menu of seafood, steaks, duck, and other dishes.

Hanson's Quality Foods has opened its eighth grocery store in the Valley and is planning to open three more before Thanksgiving. The 9,000- to 12,000-square-foot stores offer fresh produce; fresh meats and seafoods; and health, gourmet, and dried foods. Also available is a large selection of bulk foods.

Kay Jewelers is moving its western region credit office to Tempe. Located at 1150 East University Drive, the office will handle collections and credit approvals for Kay Jewelers outlets in Arizona and eight other states.

CONSTRUCTION - Sonoran Heights, a subdivision of 264 homes at 128th and Cholla streets in Scottsdale, is under construction. The homes will range in size from 2,800 to 3,700 square feet and be priced from $210,000 and $350,000. Thirty acres of the site will be left in its natural desert state.

Construction has begun on the $27.8 million Sun Valley Parkway, a 28-mile link between Interstate 10 and Bell Road in Surprise. Scheduled for completion in 1989, the six-lane highway will run from the Palo Verde interchange around the west side of the White Tank Mountains and then east to Bell Road.

Construction is underway on the Three Gateway Office Building in the First Gateway Center at 44th and Van Buren streets in Phoenix. The 11-story building will feature a two-story atrium, an eleventh floor lobby with a skylight, and a glass exterior. The project should be completed next summer.

Camelback Fountains, a $21 million project of residential and office buildings in Phoenix, will be built in two phases. Beginning in December, the first phase will consist of a 60,000-square-foot three-story building with frontage on Camelback Road and should be completed in the fall of 1988. The 85,000-square-foot, second-phase building will also have three levels and frontage on 32nd Street. The residential component will include 50 condominiums.

Carver Development Co. of Newport Beach, California, has begun construction on a $7 million garden office complex which will house its new Phoenix branch office. The two-story complex will occupy 11.8 acres in the Southbank business park, located just south of Sky Harbor Airport at 32nd Street and Interstate 10. Completion is targeted for the first quarter of 1988.

The Phoenix City Council has approved the building of three bicycle routes totaling 27 miles in the Maryvale, Moon Valley, and Encanto neighborhoods. The cost of $80,000 will cover bike signs, painting stripes along the streets to designate bike right of way, and curb cuts. City officials hope to build 392 miles of bike routes and paths by the year 2000 at a cost of $9.6 million.

Scottsdale's Westminster Village Inc. is building a full-service life care retirement community at the southeast corner of Cactus and Pima roads. Construction of the 250-unit complex should be complete by next summer.

Construction has begun on a 594-car parking garage at 100 East Boston Street in Chandler. Scheduled for completion in December, the garage is Chandler's first parking structure and is part of the city's downtown redevelopment efforts.

DEVELOPMENT - The city of Williams is turning four blocks of its downtown area into a historic district. The city is burying utility wires, removing traffic lights, adding brick sidewalks and old-fashioned street lamps, and remodeling store fronts. At the same time, a $1.89 million state road project is refurbishing the Interstate 40 business loop through Williams. The city hopes to be able to attract more tourists from the interstate.

Sasser Ltd. is planning a 324-acre community with 8,787 homes, condominiums, and an elementary school. The development, Boulder Mountain Highlands, will be located in the Desert Uplands region of Mesa.

MANUFACTURING - The annual survey of manufacturing climates conducted by Grant Thornton has ranked Arizona seventh in the nation. The study ranks each state based on state and local tax policies and incentives to businesses, state-regulated employment costs, labor costs, availability of resources, and selected quality of life issues. The Southwest was ranked first among the eight U.S. regions.

Croft Metals Inc., the second-largest private employer in Lake Havasu City, has ceased manufacturing operations there. About three-quarters of the 200 employees have been laid off. The manufacturer of aluminum window and door frames, however, will continue to warehouse inventory at the Lake Havasu City plant.

The American Electronics Association has found that Arizona's electronics firms had the nation's lowest employee-turnover rate in the industry during 1986. The Arizona rate was 9.5 percent, compared to the national average of 16.4 percent. Texas electronics firms had the highest turnover, followed by Orange County, California; metropolitan New York; and Oregon.

Phoenix-based Excel Industries Inc. has opened a Tucson facility in the Continental Business Park on Interstate 10 between Ina and Cortaro roads. The 63,000-square-foot plant provides kitchen and bath cabinets, laminated counter tops, and a variety of cultured-marble products. The Tucson facility currently employs 75 workers and plans to hire an additional 75.

Loral Defense Systems of Litchfield Park has been awarded a $29.4 million contract by the Air Force to build 17 transportation-and-handling systems for the Minuteman intercontinental ballistic missiles. The nine-axle transporter-erector vehicles are expected to be delivered from August 1988 to May 1989.

Tucson Molding Co. has opened in Tucson with 45 employees at the Midvale Park Commerce Center, near Interstate 19 and West Valencia Road. The firm manufactures wood moldings and finished trim products for the building industry.

Garrett Turbine Engine Co. of Phoenix has laid off about 600 employees, nearly 10 percent of the company's work force. The layoffs were made because of the continued slump in the general aviation industry and the end of government contracts to build auxiliary power units for the Air Force's B-1B bomber and engines for the T-46 jet trainer. Some of the terminated workers may be placed in the four other Garrett divisions in Arizona.

Hughes Aircraft Missile Systems Group of Tucson has been awarded a $134.8 million contract by the Navy for the production of 153 Phoenix missiles. The AIM-54C Phoenix long-range, air-to-air missiles are expected to be delivered between October 1988 and June 1989.

HOTELS AND RESORTS - Construction is nearing completion on a $4 million ballroom expansion at Marriott's Camelback Inn, 5402 East Lincoln Drive in Phoenix. Part of the resort's $16 million, two-year renovation program, the ballroom will be able to accommodate up to 2,300 persons for receptions, 2,200 for meetings, and 1,600 for banquets.

Construction is also underway on a $5 million health spa featuring a multi-purpose gym, a body and beauty center, and a special restaurant serving nutritious and low-calorie food. The spa should be completed in the fall of 1988.

Hyatt Development Corp. is planning to build a resort hotel on about 50 acres in the Tortolita Mountain area. Located northwest of West Tangerine and North Thornydale roads, the 400-room hotel eventually will be expanded to 600 rooms. Construction is scheduled to begin next year.

Scheduled for completion in May 1988, a $6.2 million Quality Suites Hotel is under construction in Flagstaff. The 102-suite hotel will be located on a 2.9-acre site at 706 South Milton Road. Each two-room suite will have an entertainment center equipped with an AM/FM cassette player and a video tape recorder.

A $44 million convention center is being planned for Cave Creek to accommodate large corporations that need the full-time attention that many resort hotels are unable to provide. The center, to be located on 35 acres off Cave Creek Highway on Rancho Manana Road, will consist of 45 percent meeting space. An employer would pay about $245 per person per night to keep 60 people in the center for three days. Included are three meals a day, two coffee breaks, conference rooms, and sleeping accommodations. The Center will offer a high-tech array of video equipment along with a staff of six to eight who can make laser charts and graphs at a moment's notice. Also available will be video tapes of meetings and computers that tap into home office systems.

The $7.7 million Windmill Inns of Surprise is under construction at 12545 West Bell

Road near the entrance to Sun City West. The three-story hotel, featuring 127 suites, two conference rooms, and a ballroom, will open in January.

DISTRIBUTION FACILITY - Mendenhall Distribution Co. is building a cooler and distribution facility for produce at San Luis. The 15,000-square-foot cooler will chill newly harvested vegetables and fruits and store them at temperatures in the mid-30s. Trucks from Mexico will have a special-access driveway from the border gate that leads to the facility. Delays in bringing produce across the border will be reduced because the trucks will not have to wait in line at the port of entry, and customs inspections could be done at the facility. Twenty-five to 30 workers will be employed at the cooler.

MINING - Cyprus Minerals Co. has begun extracting gold at the Cyprus Copperstone mine near Quartzsite. Morrison-Knudsen Co. Inc. is providing contract mining services with 52 employees to remove overlying rock and mine the ore. Cyprus's own 36 employees will grind the ore. Projected annual output is 60,000 ounces of gold.

FINANCE, INSURANCE, AND REAL ESTATE - Magna Mortgage Company is establishing its Western Division Regional Headquarters at Fountainhead Corporate Park in Tempe. The 14-year-old company's business is primarily first mortgage loans on homes.

Blue Cross and Blue Shield of Arizona is building a headquarters project at the southeastern corner of Pinnacle Peak Road and Interstate 17. The project will feature 523,000 square feet of space in five buildings ranging in height from two to ten stories.

The company is also developing a medical mall on 80 acres near the headquarters site. The mall will feature a hospital, a hotel, a hospice, a long-term-care center, a surgical center, medical-research offices, and retail stores.

A 50,000-square-foot addition and major refurbishing of the existing Sunland Regional office of State Farm Insurance Cos. in Tempe is currently underway. The $4 million project will expand the space for the firm's data processing and stock room.

According to Arizona State University's Real Estate Center, the number of homes sold in the Phoenix metropolitan area during the second quarter of 1987 (16,530) was the second highest quarterly total of the 1980s.

TRANSPORTATION - The Sun Tran city bus service in Tucson has adopted a transit center system. Within the near future, the bus service will revolve around a network of four major transit centers located at key activity centers in the southwest, east, northwest, and downtown areas. Advantages of a transit center system include the flexibility to accommodate varied commute and travel patterns, the ability to precisely time connections and transfers, a variety of amenities, and an off-street location for passengers to wait and board.

JOB ASSISTANCE - The U.S. Department of Labor has awarded a $400,000 grant to the Job Training Partnership Act program to assist former workers in Douglas. The grant will help to educate, retrain, and relocate employees who were laid off from the closures of the Phelps-Dodge Smelter, RJR Nabisco Inc. chile canning plant, and Billy the Kid Shirt Co.

COMMUNICATIONS - American Telephone & Telegraph Co. (AT&T) has begun hiring employees to fill 600 openings at the company's new Mesa billing office. The jobs are entry level and involve clerical work, data entry, and forms processing. The expansion will allow AT&T to take over long-distance billing operations next year. Currently, AT&T pays other companies such as Mountain Bell to do the billing.

The Papago Tribal Utility Authority has purchased the telephone system on the Tohono O'Odham Indian Reservation from Mountain Bell. Using the latest in telephone technology, the system will be expanded to provide service to about 55 villages. The $8.4 million expansion should be complete by the end of 1988.

Arizona Labor Market Newsletter
LABOR MARKET INFORMATION PUBLICATIONS
Site Code 733A
P.O. Box 6123
Phoenix, Arizona 85005

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, $300

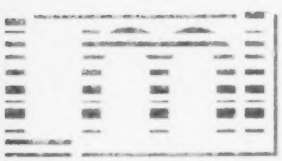
ADDRESS CORRECTION REQUESTED

POSTAGE & FEES PAID
EMPLOYMENT SECURITY MAIL
LAB 449
FIRST CLASS MAIL

2

If you do NOT desire to continue receiving this publication, please check here ☐ and return this cover to address above.

If your address has changed, please indicate change and return this cover to the address above.



This periodical is issued and printed by the Arizona Department of Economic Security as authorized by the Wagner-Peyser Act and is paid out of federal funds granted by the U.S. Department of Labor.

Reproduction of this publication for commercial use is prohibited by Section 39-121, Arizona Revised Statutes. Permission to reprint this publication, or parts of it, for nonprofit use may be granted upon written request, if credit will be given citing this publication and the Arizona Department of Economic Security.